Men Who Have Sex with Men

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HIV impacts men, women, and children of all races, ethnicities, and sexual identities; however, a disproportionate number of men who have sex with men (MSM) continue to be heavily impacted by the epidemic in the United States. While representing only approximately two percent of the US population, MSM account for more than half of new annual HIV infections; they are the only risk group in which new infections have been increasing since the early 1990s (CDC, 2010a). CDC recommends that sexually active MSM be tested for HIV at least once every year (CDC, 2010b).

Nationally†, Prejean and colleagues at the CDC estimate that of the 48,100 persons aged 13 years or older in the US who were infected with HIV in 2009, 61% were MSM. MSM who also inject drugs (MSM-IDU) contributed another three percent to the estimated HIV incidence. While there was no significant change in HIV incidence among MSM overall, the estimated incidence of HIV infection among young MSM aged 13-29 increased 34% from 2006 to 2009. By race/ethnicity, Whites accounted for 39% of the estimated HIV incidence among MSM in 2009; Blacks comprised 37% and Hispanics 20% (Prejean, 2011).

Among 8,153 adult MSM interviewed and tested in 2008, HIV prevalence was 19%. Of those who were infected, 44% were unaware of their HIV status and thus were not getting appropriate medical care or other services such as counseling and prevention to avoid transmitting HIV to others. Young MSM (aged 18-29 years) and non-White MSM were more likely to be unaware of their HIV infection (CDC, 2010b).

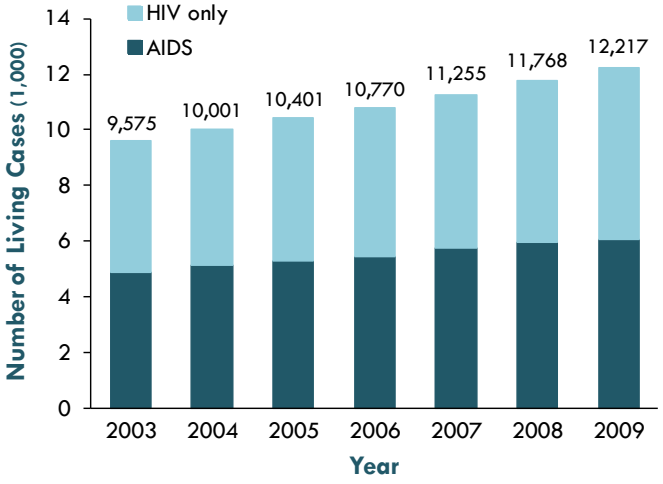
HIV prevention among MSM has many challenges. The high prevalence among this population means an individual has a greater risk of being exposed to HIV with each sexual encounter. Alcohol and drug use, unsafe sexual practice, and complacency regarding HIV all contribute to the increased risk of infection among MSM. In addition, stigma and homophobia, racism, poverty, and lack of access to medical care prevent MSM (especially minority MSM) from receiving regular HIV testing and timely care and counseling (CDC, 2010a).

In rural areas, MSM and MSM-IDU account for nearly half of all HIV infections and AIDS cases. Due to geographical isolation, limited health care and inadequate education, rural residents are medically underserved. Furthermore, MSM living in rural regions may feel uncomfortable discussing health concerns with medical providers or access the services that are available because of stigma associated with HIV (Hall, 2005). One research trial has demonstrated that the internet might be an effective tool in increasing HIV/AIDS-related knowledge and positive attitudes such as safe sex practice among rural MSM (Bowen, 2007).

HIV/AIDS PREVALENCE*

As of December 31, 2009, more than half (55%) of all people living with HIV disease in Virginia were MSM or MSM-IDU. Half of them have progressed to AIDS. The majority of MSM living with HIV/AIDS in Virginia at the end of 2009 were Black (48%), followed by Whites (43%) and Hispanics (6.5%). Most were living in the Northern (32%) or Eastern (30%) regions.

MSM and MSM-IDU Living with HIV Disease in Virginia, 2003-2009



***Research Highlight:* Estimating MSM Population Size**

Using data from the United States Census Bureau and national MSM estimates from previous research studies, Spencer Lieb and colleagues devised three models to estimate the percentages of MSM (≥18 years of age) by region, state, and race/ethnicity, in all 50 states and the District of Columbia (Lieb, 2011).

- *Model A utilizes previous research which approximated MSM populations in rural, suburban, and urban areas to calculate state-specific estimates based on total number of persons living in these three distinct geographic areas.*
- *Model B employs a "MSM Index" based on the ratio of same-sex male unmarried partner households to the total households from the Census Bureau's American Community Survey to estimate state-specific MSM numbers.*

Statewide estimates of MSM population size from Model A and Model B were strongly correlated and had similar medians and means, prompting the authors to combine them. The resulting nationwide average of MSM among the adult male population was 6.4%.

MSM population size in Virginia:

The estimated percentage of adult males (≥18 years of age) who are MSM in Virginia is 6.2%, or nearly 182,000 based on the 2009 estimated population data.

Estimated Rates: Using the above estimate, the rate of HIV disease diagnoses from 2005-2009 was 1,683 per 100,000 MSM. Black MSM were twice as likely to be diagnosed as Hispanic MSM (4,709 versus 2,144 per 100,000) and more than five times more likely than White MSM (881 per 100,000). The rates among younger MSM diagnosed between 18-24 and 25-29 were 2,671 and 2,505 per 100,000 respectively, much higher than that of the general MSM population.

Limitations: The biggest limitation is that MSM here is defined as "adults with lifetime history of male-male sexual contact" like in CDC's HIV/AIDS surveillance data, therefore the estimated rates are higher than they would be if only men with recent/ongoing male-male sexual behavior were included. In addition, the estimates were derived from the sexual behaviors of representative samples at the national level, so the trends could vary by locality and change over time. The authors suggest caution in application of these point estimates.

HIV DISEASE DIAGNOSES*

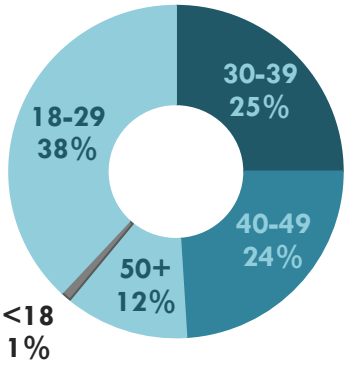
Consistent with national trends, MSM remains the population most affected by the HIV epidemic in Virginia. Between 2005 and 2009, MSM accounted for more than half (57%) of all HIV disease diagnoses, with MSM-IDU contributing an additional 2.5%. Among men diagnosed in this five year period, MSM and MSM-IDU represented 77% and 3%, respectively.

By Age at Diagnosis

The national HIV Incidence estimates† show that in 2009, 69% of all newly infected persons between the ages of 13 and 29 were MSM. Among Black and Hispanic MSM, most new infections occurred in this young age group. Young MSM aged 13-29 represented 44% of the total number of infections among MSM in 2009, an increase from 36% in 2006; this significant increase was largely driven by a statistically significant increase of 48% in young Black MSM from 2006 to 2009 (Prejean, 2011).

In Virginia, 38% of new HIV disease diagnoses in 2005-2009 were among MSM and MSM-IDU aged 18-29 at the time of diagnosis. There were no cases attributed to MSM transmission in children younger than 13. MSM and MSM-IDU aged 13-17 accounted for around one percent of total MSM diagnoses.

HIV Disease Diagnoses among MSM & MSM-IDU by Age at Diagnosis in Virginia, 2005-2009

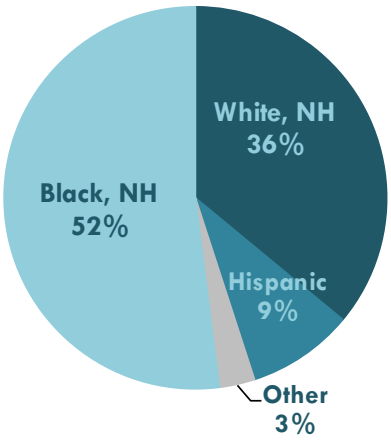


Similar to the national incidence estimation, there was an increase of 48% in cases newly diagnosed among MSM aged 13-29 from 2005-2009. Young Black MSM experienced an increase of 62% in new diagnoses during these five years.

By Race/Ethnicity

Approximately 52% of HIV disease diagnoses among MSM and MSM-IDU in Virginia from 2005 to 2009 were among Blacks. Blacks also experienced an increase of nearly 26% in the total number of diagnoses, while the number of diagnoses among Hispanic MSM remained stable and even decreased among Whites MSM during this time.

HIV Disease Diagnoses among MSM & MSM-IDU by Race/Ethnicity in Virginia, 2005-2009



White MSM (and MSM-IDU) tend to be older when diagnosed with HIV than their Hispanic or Black counterparts. While most Blacks were diagnosed between the ages of 18 and 29 (49% of total diagnoses among Blacks) and Hispanics between the ages of 25 and 39 (63%), the age at diagnosis for Whites peaked in the 40-49 age group (33%). More than 18% of White MSM were not diagnosed until after 50, compared to 8% of Blacks and 4.5% of Hispanics.

The HIV incidence estimates† show that in 2009, young MSM aged 13-29 represented 60% and 45% of total infections among Black and Hispanic MSM, respectively, but a smaller proportion of White MSM at 28%. In contrast, MSM older than 40 accounted for only 17% and 22% of HIV incidence among Black and Hispanic MSM, but for 44% of White MSM (Prejean, 2011).

By Locality

Among the 3,059 diagnoses of HIV disease in MSM and MSM-IDU from 2005 to 2009 statewide, nearly 15% were living in Rural Virginia^ at the time of diagnosis. Among male rural residents, MSM accounted for 70%; and MSM who were also injection drug users accounted for another 5% of all new diagnoses in this five-year period.

REFERENCES

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†Data presented in the national HIV incidence report are annual estimates of the number of new infections, whether or not they were actually diagnosed. In contrast, Virginia data are based on new diagnoses each year, which can include persons who were infected in previous years. These two sets of data cannot be directly compared; they are presented here only to show similarity in trends.

*Prevalence and diagnosis data presented here are estimates of the MSM and MSM-IDU transmission categories using the CDC provided multiple imputation procedure for cases reported without an identified or reported risk.

^Rural Virginia includes "Rural" and "Mixed Rural" areas as defined by the Isserman rural definition. Visit the "Rural Communities" pages of the Epidemiology Profile for more information.